Index to Volume 14

Authors and Titles

Aggarwal, P. K., and Sinha, S. K.
Response of droughted wheat to mid-season water application: recovery in leaf area and its effect on grain yield 227
Anderson, J. M. *See* Ball, M. C., Chow, W. S.
Aramrattana, P., and Scott, B. I. H.
Potassium flux studies in intact portions of the roots of *Oryza sativa* 91
Archer, M. J.
Effect of differential sulfur nutrition on the specific activity of ATP sulfurylase in mature grain from five wheat cultivars (*Triticum aestivum* L.) 239

Bacic, A., Moody, S. F., McComb, J. A., Hinch, J. M., and Clarke, A. E.
Extracellular polysaccharides from shaken liquid cultures of *Zea mays* 633
Badenoch-Jones, J. *See* Hall, P. J.; Jameson, P. E.
Badger, M. R., and Gallagher, A.
Adaptation of photosynthetic CO_2 and HCO_3^- accumulation by the cyanobacterium *Synechococcus* PCC 6301 to growth at different inorganic carbon concentrations 189
Ball, M. C., Chow, W. S., and Anderson, J. M.
Salinity-induced potassium deficiency causes loss of functional photosystem II in leaves of the grey mangrove, *Avicennia marina*, through depletion of the atrazine-binding polypeptide 351
Barlow, B. A. *See* Hall, P. J.
Barlow, E. W. R. *See* Haigh, A. M.
Batten, G. D., and Wardlaw, I. F.
Redistribution of ^{32}P and ^{14}C from the flag leaf during grain development in wheat 267
Senescence and grain development in wheat plants grown with contrasting phosphorus regimes 253
Bieleski, R. L. *See* McPharlin, I. R.
Birch, S. *See* Hope, A. B.
Bishop, T., Powles, S. B., and Cornic, G.
Mechanism of paraquat resistance in *Hordeum glaucum*.
II. Paraquat uptake and translocation 539
Boursier, P., Lynch, J., Läuchli, A., and Epstein, E.
Chloride partitioning in leaves of salt-stressed sorghum, maize, wheat and barley 463
Bruhl, J. J., Stone, N. E., and Hattersley, P. W.
C_4 acid decarboxylation enzymes and anatomy in sedges (Cyperaceae): first record of NAD-malic enzyme species 719

Burnell, J. N.
Photosynthesis in phospho*enol*pyruvate carboxykinase-type C_4 species: properties of NAD-malic enzyme from *Urochloa panicoides* 517
Bush, M. G. *See* Olugbemi, L. B.

Carroll, B. J., Hansen, A. P., McNeil, D. L., and Gresshoff, P. M.
Effect of oxygen supply on nitrogenase activity of nitrate- and dark-stressed soybean [*Glycine max* (L.) Merr.] plants 679
Castle, S. L., and Randall, P. J.
Effects of sulfur deficiency on the synthesis and accumulation of proteins in the developing wheat seed 503
Chanda, S. V., Joshi, A. K., Krishnan, P. N., and Singh, Y. D.
In vivo nitrate reductase activity in leaves of pearl-millet, *Pennisetum americanum* (L.) Leeke 125
Chow, W. S., and Anderson, J. M.
Photosynthetic responses of *Pisum sativum* to an increase in irradiance during growth
I. Photosynthetic activities 1
II. Thylakoid membrane components 9
Chow, W. S., and Hope, A. B.
The stoichiometries of supramolecular complexes in thylakoid membranes from spinach chloroplasts 21
Chow, W. S. *See also* Ball, M. C.
Clarke, A. E. *See* Bacic, A.
Cornic, G. *See* Bishop, T.; Powles, S. B.
Cruikshank, I. A. M., Dudman, W. F., Peoples, M. B., and Smith, M. M.
Elicitation of pisatin in pea (*Pisum sativum* L.) by copper–asparagine complexes 549

Daday, A., and Smith, G. D.
The hydrogenase–nitrogenase relationship in a symbiotic cyanobacterium isolated from *Macrozamia communis* L. Johnson 319
Day, D. A., Price, G. D., Schuller, K. A., and Gresshoff, P. M.
Nodule physiology of a supernodulating soybean (*Glycine max*) mutant 527
Delves, A. C., Higgins, A. V., and Gresshoff, P. M.
Shoot control of supernodulation in a number of mutant soybeans, *Glycine max* (L.) Merr. 689

Downton, W. J. S., Grant, W. J. R., and Loveys, B. R.
Carbon dioxide enrichment increases yield of Valencia orange 493
Dudman, W. F. *See* Cruikshank, I. A. M.
Dunin, F. X. *See* Wong, S. C.

Eamus, D.
Influence of preconditioning upon the changes in leaf conductance and leaf water potential of soybean, induced by chilling, water stress and abscisic acid 331
Eckhardt, L. *See* Wardlaw, I. F.
Edwards, G. E. *See* Moore, B. d.
Epstein, E. *See* Boursier, P.
Evans, J. R.
The dependence of quantum yield on wavelength and growth irradiance 69
The relationship between electron transport components and photosynthetic capacity in pea leaves grown at different irradiances 157
Evans, J. R., and Terashima, I.
Effects of nitrogen nutrition on electron transport components and photosynthesis in spinach 59
Evans, L. T.
Short day induction of inflorescence initiation in some winter wheat varieties 277

Fisher, D. B.
Changes in the concentration and composition of peduncle sieve tube sap during grain filling in normal and phosphate-deficient wheat plants 147
French, R., and Paleg, L. G.
Kinetics of peptide hydrolase activity in crude wheat leaf extracts 421

Gallagher, A. *See* Badger, M. R.
Gardner, P. A. *See* Rawson, H. M.
Georgiadis, N. J. *See* Toft, N. L.
Giersch, C., and Robinson, S. P.
Effects of photoinhibition on photosynthetic carbon metabolism in intact isolated spinach chloroplasts 439
Giersch, C. *See also* Robinson, S. P.
Grant, W. J. R. *See* Downton, W. J. S.
Gresshoff, P. M. *See* Carroll, B. J.; Day, D. A.; Delves, A. C.

Haigh, A. M., and Barlow, E. W. R.
Water relations of tomato seed germination 485
Hall, P. J., Badenoch-Jones, J., Parker, C. W., Letham, D. S., and Barlow, B. A.
Identification and quantification of cytokinins in the xylem sap of mistletoes and their hosts in relation to leaf mimicry 429
Hansen, A. P. *See* Carroll, B. J.
Hattersley, P. W. *See* Prendergast, H. D. V.; Bruhl, J. J.
Higgins, A. V. *See* Delves, A. C.
Hinch, J. M. *See* Bacic, A.
Hope, A. B., Birch, S., and Matthews, D. B.
Further studies of proton translocations in chloroplasts after single-turnover flashes. IV. Effects of cytochrome *b/f* complex inhibitors on proton uptake and cytochrome *b*6 turnover 47
Hope, A. B., and Matthews, D. B.
The slow phase of the electrochromic shift in relation to the *Q*-cycle in thylakoids 29
Hope, A. B. *See also* Chow, W. S.
Huang, Huibai, and Qiu, Yunxia
Growth correlations and assimilate partitioning in the arillate fruit of *Litchi chinensis* Sonn. 181
Hunt, E. R. Jr, and Nobel, P. S.
Non-steady-state water flow for three desert perennials with different capacitances 363

Jameson, P. E., Letham, D. S., Zhang, R., Parker, C. W., and Badenoch-Jones, J.
Cytokinin translocation and metabolism in lupin species. I. Zeatin riboside introduced into the xylem at the base of *Lupinus angustifolius* stems 695
Jones, G. P. *See* Poljakoff-Mayber, A.; Naidu, B. P.
Joshi, A. K. *See* Chanda, S. V.

Kriedemann, P. E. *See* Lloyd, J.
Krishnan, P. N. *See* Chanda, S. V.
Ku, M. S. B. *See* Moore, B. d.
Küppers, M. *See* Myers, B. A.

Larkin, P. J.
Calmodulin levels are not responsible for aluminium tolerance in wheat 377
Läuchli, A. *See* Boursier, P.

Lauter, D. J., and Munns, D. N.
Salt sensitivity of chickpea during vegetative growth and at different humidities 171
Letham, D. S. *See* Hall, P. J.; Jameson, P. E.
Lloyd, J., Kriedemann, P. E., and Syvertsen, J. P.
Gas exchange, water relations and ion concentrations of leaves on salt-stressed 'Valencia' orange *Citrus sinensis* (L.) Osbeck 387
Lloyd, J., Syvertsen, J. P., and Kriedemann, P. E.
Salinity effects on leaf water relations and gas exchange of 'Valencia' orange, *Citrus sinensis* (L.) Osbeck, on rootstocks with different salt exclusion characteristics 605
Long, M. J. *See* Rawson, H. M.
Loveys, B. R. *See* Downton, W. J. S.
Lynch, J. *See* Boursier, P.

Manetas, Y. *See* Selinioti, E.
Masle, J., and Passioura, J. B.
The effect of soil strength on the growth of young wheat plants 643
Matthews, D. B. *See* Hope, A. B.
McComb, J. A. *See* Bacic, A.
McNaughton, G. S. *See* Minchin, P. E. H.
McNaughton, S. J. *See* Toft, N. L.
McNeil, D. L. *See* Carroll, B. J.
McPharlin, I. R., and Bieleski, R. L.
Phosphate uptake by *Spirodela* and *Lemna* during early phosphorus deficiency 561
Milborrow, B. V. *See* Vaughan, G. T.
Minchin, P. E. H., and McNaughton, G. S.
Xylem transport of recently fixed carbon within lupin 325
Minchin, P. E. H., and Thorpe, M. R.
Is phloem transport due to a hydrostatic pressure gradient? Supporting evidence from pressure chamber experiments 397
Moody, S. F. *See* Bacic, A.
Moore, B. d., Ku, M. S. B., and Edwards, G. E.
C_4 photosynthesis and light-dependent accumulation of inorganic carbon in leaves of C_3–C_4 and C_4 *Flaveria* species 657
Munns, D. N. *See* Lauter, D. J.
Myers, B. A., Küppers, M., and Neales, T. F.
Effect of stem excision under water on bulk leaf water potential, leaf conductance, CO_2 assimilation and stemwood water storage in *Eucalyptus behriana* F. Muell 135

Naidu, B. P., Jones, B. P., Paleg, L. G., and Poljakoff-Mayber, A.
Proline analogues in *Melaleuca* species: response of *Melaleuca lanceolata* and *M. uncinata* to water stress and salinity 669
Naidu, B. P. *See also* Poljakoff-Mayber, A.
Neales, T. F. *See* Myers, B. A.
Nikolopoulos, D. *See* Selinioti, E.
Nobel, P. S. *See* Hunt, E. R. Jr

Olugbemi, L. B., and Bush, M. G.
The influence of temperature on the contribution of awns to yield in wheat 299

Paleg, L. G. *See* French, R.; Poljakoff-Mayber, A.; Naidu, B. P.
Pan, Shu-mei
Characterisation of multiple acid phosphatases in salt-stressed spinach leaves 117
Parker, C. W. *See* Hall, P. J.; Jameson, P. E.
Passioura, J. B. *See* Masle, J.
Peoples, M. B. *See* Cruikshank, I. A. M.
Poljakoff-Mayber, A., Symon, D. E., Jones, G. P., Naidu, B. P., and Paleg, L. G.
Nitrogenous compatible solutes in native South Australian plants 341
Poljakoff-Mayber, A. *See also* Naidu, B. P.
Powles, S. B., and Cornic, G.
Mechanism of paraquat resistance in *Hordeum glaucum*.
I. Studies with isolated organelles and enzymes 81
Powles, S. B. *See also* Bishop, T.
Prendergast, H. D. V., Hattersley, P. W., and Stone, N. E.
New structural/biochemical associations in leaf blades of C_4 grasses (Poaceae) 403
Price, G. D. *See* Day, D. A.

Qiu, Yunxia *See* Huang, Huibai

Randall, P. J. *See* Castle, S. L.
Rawson, H. M., Gardner, P. A., and Long, M. J.
Sources of variation in specific leaf area in wheat grown at high temperature 287
Robinson, S. P., and Giersch, C.
Inorganic phosphate concentration in the stroma of isolated chloroplasts and its influence on photosynthesis 451
Robinson, S. P. *See also* Giersch, C.

Schuller, K. A. *See* Day, D. A.
Scott, B. I. H. *See* Aramrattana, P.

Selinioti, E., Nikolopoulos, D., and Manetas, Y.
Organic cosolutes as stabilisers of phospho*enol*pyruvate carboxylase in storage: an interpretation of their action 203
Shepherd, K. W. *See* Singh, N. K.
Sheriff, D. W.
Why did the apparent hydraulic conductance of plants oscillate for Passioura and Tanner? [comment] 475
Singh, N. K., and Shepherd, K. W.
Solubility behaviour, synthesis, degradation and subcellular location of a new class of disulfide-linked proteins in wheat endosperm 245
Singh, Y. D. *See* Chanda, S. V.
Sinha, S. K. *See* Aggarwal, P. K.
Smith, G. D. *See* Daday, A.
Smith, M. M. *See* Cruikshank, I. A. M.
Stone, N. E. *See* Prendergast, H. D. V.; Bruhl, J. J.
Symon, D. E. *See* Poljakoff-Mayber, A.
Syvertsen, J. P. *See* Lloyd, J.

Terashima, I. *See* Evans, J. R.
Thorpe, M. R. *See* Minchin, P. E. H.
Toft, N. L., McNaughton, S. J., and Georgiadis, N. J.
Effects of water stress and simulated grazing on leaf elongation and water relations of an East African grass, *Eustachys paspaloides* 211

Vaughan, G. T., and Milborrow, B. V.
The occurrence and metabolism of the 1′, 4′-diols of abscisic acid 593
Wardlaw, I. F., and Eckhardt, L.
Assimilate movement in *Lolium* and *Sorghum* leaves.
IV. Photosynthetic responses to reduced translocation and leaf storage 573
Wardlaw, I. F. *See also* Batten, G. D.
Wolfe, J.
Lateral stresses in membranes at low water potential 311
Wong, S. C., and Dunin, F. X.
Photosynthesis and transpiration of trees in a eucalypt forest stand: CO_2, light and humidity responses 619

Zhang, R. *See* Jameson, P. E.

Printed by CSIRO, Melbourne